

Express Mail No.:

ifw

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))			Docket No. 56029/45752	
In Re Application Of: Virgin, Herbert W.				
Serial No. 10/757,832	Filing Date 01/14/2004	Examiner To be assigned	Group Art Unit 1615	
Title: Murine Calicivirus				
<p>Address to: Assistant Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450</p> <p>37 CFR 1.97(b)</p> <p>1. <input checked="" type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</p> <p>37 CFR 1.97(c)</p> <p>2. <input type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:</p> <p><input type="checkbox"/> the statement specified in 37 CFR 1.97(e);</p> <p>OR</p> <p><input type="checkbox"/> the fee set forth in 37 CFR 1.17(p).</p>				

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))			Docket No. 56029/45752	
In Re Application: Virgin, Herbert W.				
Serial No. 10/757,832	Filing Date 01/14/2004	Examiner To be assigned	Group Art Unit 1615	

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of _____ is attached.
- ☒ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 20-0823 as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of _____
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

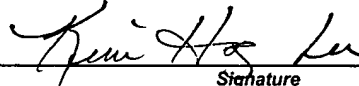
Certificate of Transmission by Facsimile*

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax No. _____) on _____ _____ (Date)
_____ <i>Signature</i>
_____ <i>Typed or Printed Name of Person Signing Certificate</i>

Certificate of Mailing

I certify that this document and fee is being deposited on <u>12/23/04</u> with the U.S. Postal Service as Express Mail under 37 C.F.R. 1.8 and addressed to the Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
_____ <i>Signature of Person Mailing Correspondence</i>
Kimberly H. Lu _____ <i>Typed or Printed Name of Person Mailing Certificate</i>

***This certificate may only be used if paying by deposit account.**

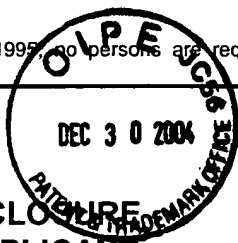


Signature
 Kimberly H. Lu, Reg. No. 51,973
 Thompson Coburn LLP
 One US Bank Plaza
 St. Louis, Missouri 63101-9928
 314-552-6307
 314-552-7307 FAX

Dated: 12/23/04

Customer No: 021888

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/757,832
Filing Date	01/14/2004
First Named Inventor	Virgin, Herbert W.
Art Unit	1615
Examiner Name	To be assigned
Attorney Docket Number	56029/45752

Sheet	1	of	16
-------	---	----	----

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	2	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	01	GLASS, R.I. et al. The Epidemiology of Enteric Caliciviruses from Humans: A Reassessment Using New Diagnostics. The Journal of Infectious Diseases 181 Suppl 2, S254-S261 (2000).	
	02	KAPIKIAN, A.Z. et al. Fields Virology. Fields, B.N. et al. (eds), 783-810 (1996).	
	03	PANG, X.L. et al. Human Calicivirus-Associated Sporadic Gastroenteritis in Finnish Children Less Than Two-Years of Age Followed Prospectively During a Rotavirus Vaccine Trial. Pediatr. Infect. Dis. J. 18, 420-426 (1999).	
	04	PANG, X.L. et al. Human Caliciviruses in Acute Gastroenteritis of Young Children in the Community. The Journal of Infectious Diseases 181 Suppl 2, S288-S294 (2000).	
	05	KAPIKIAN, A.Z. et al. Visualization by Immune Electron Microscopy of a 27-nm Particle Associated with Acute Infectious Nonbacterial Gastroenteritis. Journal of Virology 10, 1075-1081 (1972).	
	06	JIANG, X. et al. Norwalk Virus Genome Cloning and Characterization. Science 250, 1580-1583 (1990).	
	07	JIANG, X. et al. Sequence and Genomic Organization of Norwalk Virus. Virology 195, 51-61 (1993).	
	08	HARDY, M.E. et al. Completion of the Norwalk Virus Genome Sequence. Virus Genes 12, 287-290 (1996).	
	09	MAYO, M.A., Virus Taxonomy. Archives of Virology 147, 1071-1076 (2002).	
	10	FANKHAUSER, R.L. et al. Molecular Epidemiology of "Norwalk-like Viruses" in Outbreaks of Gastroenteritis in the United States. The Journal of Infectious Diseases 178, 1571-1578 (1998).	
	11	HEDLUND, K.O. et al. Epidemiology of Calicivirus Infections in Sweden, 1994-1998. The Journal of Infectious Diseases 181 Suppl 2, S275-S280 (2000).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	3	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	12	KOOPMANS, M. et al. Molecular Epidemiology of Human Enteric Caliciviruses in The Netherlands. The Journal of Infectious Diseases 181 Suppl 2, S262-S269 (2000).	
	13	INOUE, S. et al. Surveillance of Viral Gastroenteritis in Japan: Pediatric Cases and Outbreak Incidents. The Journal of Infectious Diseases 181 Suppl 2, S270-S274 (2000).	
	14	TREANOR, J. et al. Principles and Practice of Infectious Diseases. Mandell, G.L. et al. (eds.), 1666-1672 (Churchill Livingston, New York, 1995).	
	15	OKHUYSEN, P.C. et al. Viral Shedding and Fecal IgA Response After Norwalk Virus Infection. The Journal of Infectious Diseases 171, 566-569 (1995).	
	16	MCCARTHY, M. et al. Norwalk-like Virus Infection in Military Forces: Epidemic Potential, Sporadic Disease, and the Future Direction of Prevention and Control Efforts. The Journal of infectious Diseases 181 Suppl 2, S387-S391 (2000).	
	17	LOPMAN, B.A. et al. Human Caliciviruses in Europe. Journal of Clinical Virology 24, 137-160 (2002).	
	18	CLARKE and LAMBDEN. Viral Zoonoses and Food of Animal Origin: Caliciviruses and Human Disease. Archives of Virology Suppl 13, 141-152 (1997).	
	19	PRINGLE, C.R. Virus Taxonomy -- 1999. The Universal System of Virus Taxonomy, Updated to Include the New Proposals Ratified by the International Committee on Taxonomy of Viruses During 1998. Archives of Virology 144, 421-429 (1999).	
	20	GREEN, K.Y. et al. Taxonomy of the Caliciviruses. The Journal of Infectious Diseases 181 Suppl 2, S322-S330 (2000).	
	21	CLARKE and LAMBDEN. Organization and Expression of Calicivirus Genes. The Journal of Infectious Diseases 181 Suppl 2, S309-S316 (2000).	
	22	CLARKE and LAMBDEN. The Molecular Biology of Caliciviruses. Journal of General Virology 78 (Pt 2), 291-301 (1997).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	4	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	23	ANDO, T. et al. Genetic Classification of "Norwalk-like Viruses". The Journal of Infectious Diseases 181 Suppl 2, S336-S348 (2000).	
	24	JIANG, X. et al. Characterization of a Novel Human Calicivirus That May Be a Naturally Occurring Recombinant. Archives of Virology 144, 2377-2387 (1999).	
	25	VINJE, J. et al. Genetic Polymorphism Across Regions of the Three Open Reading Frames of "Norwalk-like Viruses". Archives of Virology 145, 223-241 (2000).	
	26	MEYERS, G. et al. Genomic and Subgenomic RNAs of Rabbit Hemorrhagic Disease Virus Are Both Protein-Linked and Packaged into Particles. Virology 184, 677-686 (1991).	
	27	HERBERT, T.P. et al. Identification of a Protein Linked to the Genomic and Subgenomic mRNAs of Feline Calicivirus and Its Role In Translation. Journal of General Virology 78 (Pt 5), 1033-1040 (1997).	
	28	DUNHAM, D.M. et al. Genomic Mapping of a Calicivirus VPg. Archives of Virology 143, 2421-2430 (1998).	
	29	EHRESMANN and SCHAFFER. Calicivirus Intracellular RNA: Fractionation of 18-22 S RNA and Lack of Typical 5'-Methylated Caps on 36 S and 22 S San Miguel Sea Lion Virus RNAs. Virology 95, 251-255 (1979).	
	30	SCHAFFER, F.L. et al. A Protein, VPg, Covalently Linked to 36S Calicivirus RNA. Journal of General Virology 47, 215-219 (1980).	
	31	NEILL, J.D. et al. Nucleotide Sequence and Expression of the Capsid Protein Gene of Feline Calicivirus. Journal of Virology 65, 5440-5447 (1991).	
	32	BOGA, J.A. et al. In Vitro Translation of a Subgenomic mRNA from Purified Virions of the Spanish Field Isolate AST/89 of Rabbit Hemorrhagic Disease Virus (RHDV). Virus Research 26, 33-40 (1992).	
	33	THIEL and KONIG. Caliciviruses: An Overview. Veterinary Microbiology 69, 55-62 (1999).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	5	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	34	SOSNOVTSEV and GREEN. RNA Transcripts Derived from a Cloned Full-Length Copy of the Feline Calicivirus Genome Do Not Require VpG for Infectivity. <i>Virology</i> 210, 383-390 (1995).	
	35	BURROUGHS and BROWN. Presence of a Covalently Linked Protein on Calicivirus RNA. <i>Journal of General Virology</i> 41, 443-446 (1978).	
	36	VAZQUEZ, A.L. et al. Expression of Enzymatically Active Rabbit Hemorrhagic Disease Virus RNA-Dependent RNA Polymerase in <i>Escherichia coli</i> . <i>Journal of Virology</i> 72, 2999-3004 (1998).	
	37	VAZQUEZ, A.L. et al. Mutation Analysis of the GDD Sequence Motif of a Calicivirus RNA-Dependent RNA Polymerase. <i>Journal of Virology</i> 74, 3888-3891 (2000).	
	38	RACANIELLO, V.R. <i>Fields Virology</i> . Fields, B.N. et al. (eds.), 685-722 (2001).	
	39	CLARKE and LAMBDEN. Polyprotein Processing in Southampton Virus: Identification of 3C-like Protease Cleavage Sites by In Vitro Mutagenesis. <i>Journal of Virology</i> 70, 2605-2610 (1996).	
	40	LIU, B.L. et al. Identification of Further Proteolytic Cleavage Sites in the Southampton Calicivirus Polyprotein by Expression of the Viral Protease in <i>E. coli</i> . <i>Journal of General Virology</i> 80 (Pt 2), 291-296 (1999).	
	41	SEAH, E.L. et al. Open Reading Frame 1 of the Norwalk-like Virus Camberwell: Completion of Sequence and Expression in Mammalian Cells. <i>Journal of Virology</i> 73, 10531-10535 (1999).	
	42	SOMEYA, Y. et al. Complete Nucleotide Sequence of the Chiba Virus Genome and Functional Expression of the 3C-like Protease in <i>Escherichia coli</i> . <i>Virology</i> 278, 490-500 (2000).	
	43	SOSNOVTSEV, S.V., et al. Cleavage of the Feline Calicivirus Capsid Precursor Is Mediated by a Virus-Encoded Proteinase. <i>Journal of Virology</i> 72, 3051-3059 (1998).	
	44	SOSNOVTSEVA, S.A. et al. Mapping of the Feline Calicivirus Proteinase Responsible for Autocatalytic Processing of the Nonstructural Polyprotein and Identification of a Stable Proteinase-Polymerase Precursor Protein. <i>Journal of Virology</i> 73, 6626-6633 (1999).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	6	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	45	ALONSO, J.M.M. et al. Processing of Rabbit Hemorrhagic Disease Virus Polyprotein. Journal of Virology 70, 1261-1265 (1996).	
	46	WIRBLICH, C. et al., Genetic Map of the Calicivirus Rabbit Hemorrhagic Disease Virus as Deduced from In Vitro Translation Studies. Journal of Virology 70, 7974-7983 (1996).	
	47	WIRBLICH, C., et al. 3C-like Protease of Rabbit Hemorrhagic Disease Virus: Identification of Cleavage Sites in the ORF1 Polyprotein and Analysis of Cleavage Specificity. Journal of Virology 69, 7159-7168 (1995).	
	48	JOUBERT, P. et al. Identification of a New Cleavage Site of the 3C-like Protease of Rabbit Haemorrhagic Disease Virus. Journal of General Virology 81, 481-488 (2000).	
	49	MEYERS, G. et al. Rabbit Hemorrhagic Disease Virus: Genome Organization and Polyprotein Processing of a Calicivirus Studied After Transient Expression of cDNA Constructs. Virology 276, 349-363 (2000).	
	50	SOMEYA, Y. et al. Identification of Active-Site Amino Acid Residues in the Chiba Virus 3C-like Protease. Journal of Virology 76, 5949-5958 (2002).	
	51	BONIOTTI, B. et al. Identification and Characterization of a 3C-like Protease from Rabbit Hemorrhagic Disease Virus, A Calicivirus. Journal of Virology 68, 6487-6495 (1994).	
	52	PFISTER and WIMMER. Polypeptide p41 of a Norwalk-like Virus Is a Nucleic Acid-Independent Nucleoside Triphosphatase. Journal of Virology 75, 1611-1619 (2001).	
	53	GLASS, P.J. et al. Norwalk Virus Open Reading Frame 3 Encodes a Minor Structural Protein. Journal of Virology 74, 6581-6591 (2000).	
	54	CAUCHI, M.R. et al. Molecular Characterization of Camberwell Virus and Sequence Variation in ORF3 of Small Round-Structured (Norwalk-like) Viruses. Journal of Medical Virology 49, 70-76 (1996).	
	55	SEAH, E.L. et al. Variation in ORF3 of Genogroup 2 Norwalk-like Viruses. Archives of Virology 144, 1007-1014 (1999).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	7	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	56	SOSNOVTSEV and GREEN. Identification and Genomic Mapping of the ORF3 and VPg Proteins in Feline Calicivirus Virions. <i>Virology</i> 277, 193-203 (2000).	
	57	NEILL, J.D. Nucleotide Sequence of the Capsid Protein Gene of Two Serotypes of San Miguel Sea Lion Virus: Identification of Conserved and Non-Conserved Amino Acid Sequences Among Calicivirus Capsid Proteins. <i>Virus Research</i> 24, 211-221 (1992).	
	58	ATMAR and ESTES. Diagnosis of Noncultivable Gastroenteritis Viruses, the Human Caliciviruses. <i>Clinical Microbiology Reviews</i> 14, 15-37 (2001).	
	59	FLYNN and SAIF. Serial Propagation of Porcine Enteric Calicivirus-like Virus in Primary Porcine Kidney Cell Cultures. <i>Journal of Clinical Microbiology</i> 26, 206-212 (1988).	
	60	SMITH, A.W. et al. Caliciviruses of Ocean Origin: A Review. <i>Journal of Zoo and Wildlife Medicine</i> 21(1), 3-23 (1990).	
	61	EHRESMANN and SCHAFFER. RNA Synthesized in Calicivirus-Infected Cells is Atypical of Picornaviruses. <i>Journal of Virology</i> 22, 572-576 (1977).	
	62	STUDDERT and O'SHEA. Ultrastructural Studies of the Development of Feline Calicivirus in a Feline Embryo Cell Line. <i>Archives of Virology</i> 48, 317-325 (1975).	
	63	LANGLOSS, J.M., et al. In Vitro Interaction of Alveolar Macrophages and Pneumocytes with Feline Respiratory Viruses. <i>Infection and Immunity</i> 20, 836-841 (1978).	
	64	GREEN, K.Y. et al. Expression and Self-Assembly of Recombinant Capsid Protein from the Antigenically Distinct Hawaii Human Calicivirus. <i>Journal of Clinical Microbiology</i> 35, 1909-1914 (1997).	
	65	KREUTZ, L.C. et al. Early Interaction of Feline Calicivirus With Cells in Culture. <i>Archives of Virology</i> 136, 19-34 (1994).	
	66	KREUTZ and SEAL. The Pathway of Feline Calicivirus Entry. <i>Virus Research</i> 35, 63-70 (1995).	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	8	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	67	KONIG, M. et al. Detection of Viral Proteins After Infection of Cultured Hepatocytes with Rabbit Hemorrhagic Disease Virus. Journal of Virology 72, 4492-4497 (1998).	
	68	JIANG, X. et al. Baculovirus Expression and Antigenic Characterization of the Capsid Proteins of Three Norwalk-like Viruses. Archives of Virology 147, 119-130 (2002).	
	69	GREEN, K.Y. et al. Comparison of the Reactivities of Baculovirus-Expressed Recombinant Norwalk Virus Capsid Antigen with Those of the Native Norwalk Virus Antigen in Serologic Assays and Some Epidemiologic Observations. Journal of Clinical Microbiology 31, 2185-2191 (1993).	
	70	HARDY, M.E. et al. Specific Proteolytic Cleavage of Recombinant Norwalk Virus Capsid Protein. Journal of Virology 69, 1693-1698 (1995).	
	71	PELOSI, E. et al. The Seroepidemiology of Genogroup 1 and Genogroup 2 Norwalk-like Viruses in Italy. Journal of Medical Virology 58, 93-99 (1999).	
	72	JIANG, X. et al. Expression and Characterization of Sapporo-like Human Calicivirus Capsid Proteins in Baculovirus. Journal of Virological Methods 78, 81-91 (1999).	
	73	GEISSLER, K. et al. Feline Calicivirus Capsid Protein Expression and Capsid Assembly in Cultured Feline Cells. Journal of Virology 73, 834-838 (1999).	
	74	LAURENT, S. et al. Recombinant Rabbit Hemorrhagic Disease Virus Capsid Protein Expressed In Baculovirus Self-Assembles into Viruslike Particles and Induces Protection. Journal of Virology 68, 6794-6798 (1994).	
	75	PRASAD, B.V. et al. Structural Studies of Recombinant Norwalk Capsids. The Journal of Infectious Diseases 181 Suppl 2, S317-S321 (2000).	
	76	PRASAD, B.V. et al. Three-Dimensional Structure of Calicivirus. Journal of Molecular Biology 240, 256-264 (1994).	
	77	PRASAD, B.V. et al. Three-Dimensional Structure of Baculovirus-Expressed Norwalk Virus Capsids. Journal of Virology 68, 5117-5125 (1994).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	9	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	78	PRASAD, B.V. et al. X-ray Crystallographic Structure of the Norwalk Virus Capsid. Science 286, 287-290 (1999).	
	79	WHITE, L.J. et al. Attachment and Entry of Recombinant Norwalk Virus Capsids to Cultured Human and Animal Cell Lines. Journal of Virology 70, 6589-6597 (1996).	
	80	WHITE, L.J. et al. Biochemical Characterization of a Smaller Form of Recombinant Norwalk Virus Capsids Assembled in Insect Cells. Journal of Virology 71, 8066-8072 (1997).	
	81	JIANG, X. et al. Expression, Self-Assembly, and Antigenicity of a Snow Mountain Agent-like Calicivirus Capsid Protein. Journal of Clinical Microbiology 33, 1452-1455 (1995).	
	82	LEITE, J.P. et al. Characterization of Toronto Virus Capsid Protein Expressed in Baculovirus. Archives of Virology 141, 865-875 (1996).	
	83	TANIGUCHI, K. et al. Further Studies of 35-40-NM Virus-like Particles Associated With Outbreaks of Acute Gastroenteritis. Journal of Medical Microbiology 14, 107-118 (1981).	
	84	NAGESHA, H.S. et al. Virus-like Particles of Calicivirus as Epitope Carriers. Archives of Virology 144, 2429-2439 (1999).	
	85	GRANZOW, H. et al. Rabbit Hemorrhagic Disease Virus (RHDV): Ultrastructure and Biochemical Studies of Typical and Core-like Particles Present in Liver Homogenates. Virus Research 41, 163-172 (1996).	
	86	HILLMAN, B.B. et al. An Invertebrate Calici-like Virus: Evidence for Partial Virion Disintegration in Host Excreta. Journal of General Virology 60, 115-123 (1982).	
	87	SMITH, A.W. et al. Calicivirus Emergence from Ocean Reservoirs: Zoonotic and Interspecies Movements. Emerging Infectious Diseases 4, 13-20 (1998).	
	88	POULET, H. et al. Comparison Between Acute Oral/Respiratory and Chronic Stomatitis/Gingivitis Isolates of Feline Calicivirus: Pathogenicity, Antigenic Profile and Cross-Neutralisation Studies. Archives of Virology 145, 243-261 (2000).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	10	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	89	PEDERSEN, N.C. et al. An Isolated Epizootic of Hemorrhagic-like Fever in Cats Caused by a Novel and Highly Virulent Strain of Feline Calicivirus. <i>Veterinary Microbiology</i> 73, 281-300 (2000).	
	90	VAN VUUREN, M. et al. Characterisation of a Potentially Abortigenic Strain of Feline Calicivirus Isolated from a Domestic Cat. <i>Veterinary Record</i> 144, 636-638 (1999).	
	91	POVEY, R.C. et al. Feline Picornavirus Infection: The <i>in vivo</i> Carrier State. <i>The Veterinary Record</i> 92, 224-229 (1973).	
	92	WARDLEY and POVEY. The Clinical Disease and Patterns of Excretion Associated with Three Different Strains of Feline Caliciviruses. <i>Research in Veterinary Science</i> 23, 7-14 (1976).	
	93	DOLIN, R. et al. Viral Gastroenteritis Induced by the Hawaii Agent. Jejunal Histopathology and Serologic Response. <i>The American Journal of Medicine</i> 59, 761-768 (1975).	
	94	AGUS, S.G. et al. Acute Infectious Nonbacterial Gastroenteritis: Intestinal Histopathology. Histologic and Enzymatic Alterations During Illness Produced by the Norwalk Agent in Man. <i>Annals of Internal Medicine</i> 79, 18-25 (1973).	
	95	SCHREIBER, D.S. et al. The Small Intestinal Lesion Induced by Hawaii Agent Acute infectious Nonbacterial Gastroenteritis. <i>The Journal of Infectious Diseases</i> 129, 705-708 (1974).	
	96	GILLESPIE and SCOTT, Feline Viral Infections. <i>Adv. Vet. Sci. Comp Med.</i> 17, 163-200 (1973).	
	97	DAWSON, S. et al. Acute Arthritis of Cats Associated with Feline Calicivirus Infection. <i>Research in Veterinary Science</i> 56, 133-143 (1994).	
	98	PARK, J.H. et al. Detection of Rabbit Haemorrhagic Disease Virus Antigen in Tissues by Immunohistochemistry. <i>Research in Veterinary Science</i> 52, 299-306 (1992).	
	99	CAPUCCI, L. et al. Detection and Preliminary Characterization of a New Rabbit Calicivirus Related to Rabbit Hemorrhagic Disease Virus but Nonpathogenic. <i>Journal of Virology</i> 70, 8614-8623 (1996).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	11	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	100	BURROUGHS, N. et al. Relationship of San Miguel Sea Lion Virus to Other Members of the Calicivirus Group. Intervirology 10, 51-59 (1978).	
	101	LONG, G.G. et al. Naturally Occurring Picornavirus Infection of Domestic Mink. Canadian Journal of Comparative Medicine 44, 412-417 (1980).	
	102	SMITH, A.W. et al. In Vitro Isolation and Characterization of a Calicivirus Causing a Vesicular Disease of the Hands and Feet. Clinical Infectious Diseases 26, 434-439 (1998).	
	103	SHIEH, Y. et al. Detection of Norwalk-like Virus in Shellfish Implicated in Illness. The Journal of Infectious Diseases 181 Suppl 2, S360-S366 (2000).	
	104	MOCHIZUKI, M. et al. Different Stabilities to Bile Among Feline Calicivirus Strains of Respiratory and Enteric Origin. Veterinary Microbiology 31, 297-302 (1992).	
	105	DAWSON, S. et al. Investigation of Vaccine Reactions and Breakdowns After Feline Calicivirus Vaccination. The Veterinary Record 132, 346-350 (1993).	
	106	JOHNSON, R.P. et al. Feline Calicivirus Infection in Kittens Borne by Cats Persistently Infected with the Virus. Research in Veterinary Science 37, 114-119 (1984).	
	107	JOHNSON, R.P. Antigenic Change in Feline Calicivirus During Persistent Infection. Canadian Journal of Veterinarian Research 56, 326-330 (1992).	
	108	PEDERSEN, N.C. et al. Mechanisms for Persistence of Acute and Chronic Feline Calicivirus Infections in the Face of Vaccination. Veterinary Microbiology 47, 141-156 (1995).	
	109	RADFORD, A.D. et al. Quasispecies Evolution of a Hypervariable Region of the Feline Calicivirus Capsid Gene in Cell Culture and in Persistently Infected Cats. Journal of General Virology 79 (Pt 1), 1-10 (1998).	
	110	DICK, C.P. et al. Sites of Persistence of Feline Calicivirus. Research in Veterinary Science 47, 367-373 (1989).	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	12	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	111	SMITH, A.W. et al. Calicivirus Isolation and Persistence in a Pygmy Chimpanzee (<i>Pan paniscus</i>). Science 221, 79-81 (1983).	
	112	LEVETT, P.N. et al. Longitudinal Study of Molecular Epidemiology of Small Round-Structured Viruses in a Pediatric Population. Journal of Clinical Microbiology 34, 1497-1501 (1996).	
	113	GEISSLER, K. et al. Genetic and Antigenic Heterogeneity Among Feline Calicivirus Isolates from Distinct Disease Manifestations. Virus Research 48, 193-206 (1997).	
	114	KNOWLES, J.O. et al. Neutralisation Patterns Among Recent British and North American Feline Calicivirus Isolates From Different Clinical Origins. The Veterinary Record 127, 125-127 (1990).	
	115	LAURITZEN, A. et al. Serological Analysis of Feline Calicivirus Isolates from the United States and United Kingdom. Veterinary Microbiology 56, 55-63 (1997).	
	116	McARDLE, F. et al. Feline Calicivirus Strain Differentiation Using Monoclonal Antibody Analysis in an Enzyme-Linked Immuno-Flow-Assay. Veterinary Microbiology 51, 197-205 (1996).	
	117	DAWSON, S. et al. Typing of Feline Calicivirus Isolates from Different Clinical Groups by Virus Neutralisation Tests. Veterinary Record 133, 13-17 (1993).	
	118	CUKOR, G. et al. Immunoglobulin M Responses to the Norwalk Virus of Gastroenteritis. Infection and Immunity 37, 463-468 (1982).	
	119	ERDMAN, D.D. et al. Development and Evaluation of an IgM Capture Enzyme Immunoassay for Diagnosis of Recent Norwalk Virus Infection. Journal of Virological Methods 24, 57-66 (1989).	
	120	PARRINO, T.A. et al. Clinical Immunity in Acute Gastroenteritis Caused by Norwalk Agent. The New England Journal of Medicine 297, 86-89 (1977).	
	121	WYATT, R.G. et al. Comparison of Three Agents of Acute Infectious Nonbacterial Gastroenteritis by Cross-Challenge in Volunteers. The Journal of Infectious Diseases 129, 709-714 (1974).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	13	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	122	JOHNSON, P.C. et al. Multiple-Challenge Study of Host Susceptibility to Norwalk Gastroenteritis in US Adults. The Journal of Infectious Diseases 161, 18-21 (1990).	
	123	LEW, J.F. et al. Detection of Norwalk Virus or Norwalk-like Virus infections in Finnish Infants and Young Children. The Journal of Infectious Diseases 169,1364-1367 (1994).	
	124	RYDER, R.W. et al. Evidence of Immunity Induced by Naturally Acquired Rotavirus and Norwalk Virus Infection on Two Remote Panamanian Islands. The Journal of Infectious Diseases 151, 99-105 (1985).	
	125	NAKATA, S. et al. Humoral Immunity in Infants with Gastroenteritis Caused by Human Calicivirus. The Journal of Infectious Diseases 152, 274-279 (1985).	
	126	SHARP, T.W. et al. Epidemiology of Norwalk Virus During an Outbreak of Acute Gastroenteritis Aboard a US Aircraft Carrier. Journal of Medical Virology 45, 61-67 (1995).	
	127	BALL, J.M. et al. Oral Immunization with Recombinant Norwalk Virus-like Particles Induces a Systemic and Mucosal Immune Response in Mice. Journal of Virology 72, 1345-1353 (1998).	
	128	GUERRERO, R.A. et al. Recombinant Norwalk Virus-like Particles Administered Intranasally to Mice Induce Systemic and Mucosal (Fecal and Vaginal) Immune Responses. Journal of Virology 75, 9713-9722 (2001).	
	129	BALL, J.M. et al. Recombinant Norwalk Virus-Like Particles Given Orally to Volunteers: Phase I Study. Gastroenterology 117, 40-48 (1999).	
	130	MASON, H.S. et al. Expression of Norwalk Virus Capsid Protein in Transgenic Tobacco and Potato and Its Oral Immunogenicity in Mice. Proc. Natl. Acad. Sci. USA 93, 5335-5340 (1996).	
	131	TACKET, C.O. et al. Human Immune Responses to a Novel Norwalk Virus Vaccine Delivered in Transgenic Potatoes. The Journal of Infectious Diseases 182, 302-305 (2000).	
	132	KNOWLES, J.O. et al. Studies on the Role of Feline Calicivirus in Chronic Stomatitis in Cats. Veterinary Microbiology 27, 205-219 (1991).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	14	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	133	BITTLE and RUBIC. Immunization Against Feline Calicivirus Infection. American Journal of Veterinary Research 37, 275-278 (1976).	
	134	GASKELL, C.J. et al. Efficacy of an Inactivated Feline Calicivirus (FCV) Vaccine Against Challenge with United Kingdom Field Strains and Its Interaction with the FCV Carrier State. Research in Veterinary Science 32, 23-26 (1982).	
	135	BENNETT, D. et al. Detection of Feline Calicivirus Antigens in the Joints of Infected Cats. The Veterinary Record 124, 329-332 (1989).	
	136	PASTORIAN, K. et al. Optimization of cDNA Representational Difference Analysis for the Identification of Differentially Expressed mRNAs. Analytical Biochemistry 283, 89-98 (2000).	
	137	JIANG, X. et al. Baculovirus Expression and Antigenic Characterization of the Capsid Proteins of Three Norwalk-like Viruses. Archives of Virology 147, 119-130 (2002).	
	138	WARDLEY, R.C. Feline Calicivirus Carrier State A Study of the Host/Virus Relationship. Archives of Virology 52, 243-249 (1976).	
	139	LIANG, X.H. et al. Protection Against Fatal Sindbis Virus Encephalitis by Beclin, a Novel Bcl-2-Interacting Protein. Journal of Virology 72, 8586-8696 (1998).	
	140	SCHREIBER, R.D. et al. Monoclonal Antibodies to Murine Gamma Interferon Which Differentially Modulate Macrophage Activation and Antiviral Activity. The Journal of Immunology 134, 1609-1618 (1985).	
	141	TRIPP, C.S. et al. Secondary Response to Listeria Infection Requires IFN-Gamma But Is Partially Independent of IL-12. The Journal of Immunology 155, 3427-3432 (1995).	
	142	SHEEHAN, K.C. et al. Generation and Characterization of Hamster Monoclonal Antibodies That Neutralize Murine Tumor Necrosis Factors. The Journal of Immunology 142, 3884-3893 (1989).	
	143	ROGERS, H.K. et al. Interleukin 1 Participates in the Development of Anti-Listeria Responses in Normal and SCID Mice. Proc. Natl. Acad. Sci. USA 89, 1011-1015 (1992).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	15	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	144	POLIC, B. et al. Hierarchical and Redundant Lymphocyte Subset Control Precludes Cytomegalovirus Replication During Latent Infection. J. Exp. Med 188, 1047-1054 (1998).	
	145	MILLIGAN, G.N. Neutrophils Aid in Protection of the Vaginal Mucosae of Immune Mice Against Challenge with Herpes Simplex Virus Type 2. Journal of Virology 73, 6380-6386 (1999).	
	146	RADFORD, A.D. et al. Comparison of Serological and Sequence-Based Methods for Typing Feline Calicivirus Isolates from Vaccine Failures. Veterinary Record 146, 117-123 (2000).	
	147	RADFORD, A.D. et al. Molecular Analysis of Isolates of Feline Calicivirus from a Population of Cats in a Rescue Shelter. Veterinary Record 149, 477-481 (2001).	
	148	HARDY, M.E. et al. Antigenic Mapping of the Recombinant Norwalk Virus Capsid Protein Using Monoclonal Antibodies. Virology 217, 252-261, (1996).	
	149	YODA, T. et al. Characterization of Monoclonal Antibodies Generated Against Norwalk Virus GII Capsid Protein Expressed in Escherichia coli. Microbiol. Immunol. 44, 905-914, (2000).	
	150	SMITH, T.J. et al. The Structure of Cucumber Mosaic Virus and Comparison to Cowpea Chlorotic Mottle Virus. Journal of Virology 74, 7578-7586 (2000).	
	151	SMITH, T.J. et al. Neutralizing Antibody to Human Rhinovirus 14 Penetrates the Receptor-Binding Canyon. Nature 383, 350-354 (1996).	
	152	KIM, S. et al. In Vivo Natural Killer Cell Activities Revealed by Natural Killer Cell-Deficient Mice. Proc. Natl. Acad. Sci. U.S.A. 97, 2731-2736 (2000).	
	153	MAZURIER, F. et al. A Novel Immunodeficient Mouse Model—RAG2 x Common Cytokine Receptor Gamma Chain Double Mutants—Requiring Exogenous Cytokine Administration for Human Hematopoietic Stem Cell Engraftment. Journal of Interferon and Cytokine Research 19, 533-541 (1999).	
	154	MACPHERSON, A.J. et al. IgA Production Without mu or delta Chain Expression in Developing B Cells. Nature Immunology 2, 625-631 (2001).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
				Examiner Name	To be assigned
Sheet	16	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	155	CHAN, O.T. et al. A Novel Mouse with B Cells But Lacking Serum Antibody Reveals an Antibody-Independent Role for B Cells in Murine Lupus. J. Exp. Med. 189, 1639-1647 (1999).	
	156	RAMAKRISHNA, C. et al. Mechanisms of Central Nervous System Viral Persistence: The Critical Role of Antibody and B Cells. The Journal of Immunology 168, 1204-1211 (2002).	
	157	BERGMANN, C.C. et al. Impaired T Cell Immunity in B Cell-Deficient Mice Following Viral Central Nervous System Infection. The Journal of Immunology 167, 1575-1583 (2001).	
	158	Mayo, M.A. A Summary of Taxonomic Changes Recently Approved by ICTV. Archives of Virology 147, 1655-1656 (2002).	
	159	Hutson, A.M. et al. Norwalk Virus Infection and Disease Is Associated with ABO Histo-Blood Group Type. The Journal of Infectious Diseases 185, 1335-1337.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.